

ingredient the oligoheteropolysaccharide as claimed in [claim] claims 11 and 13 [and following].

11. (Amended) A method of increasing the antithrombotic activity of mammalian blood relative to the anticoagulant activity comprising administering to a mammal <sup>in need of treatment for thrombosis</sup> an oligoheteropolysaccharide [having antithrombotic activity composed of a heparin fraction] comprising depolymerized heparin containing [sulfuric] sulfate groups [having] in the quantity and in the positions characteristic of heparin wherein

(1) said oligoheteropolysaccharide has a ratio of antithrombotic activity, determined by Yin's assay, to anticoagulant activity, determined by Kaolin-Cephalin clotting time test, in vitro [greater than] of about [2.5] 2 or greater; and

(2) said oligoheteropolysaccharide has the following physico chemical properties:

(A) an average molecular weight of from about 2600 to about 5500 daltons determined by the Somogy method in comparison with commercial heparin;

(B) hexosamines after hydrolysis of [from] about [26 percent to about 30] 28 percent;

(C) uronic acids after hydrolysis of [from] about [27 percent to about 35] 31 percent;

(D) organic sulfate after hydrolysis of [from] about [26 percent to about 34] 30 percent;

- (E) specific rotation in aqueous solution "Alpha 20" of from about +40 degrees to about +50 degrees;
- (F) electrophoresis on cellulose acetate (pyridine/acetic acid/water of about 1:10:299) at about pH 4.5 and development with toluidine blue resulting in a single band with anodic mobility (U) of about  $2.1 \times 10^{-4} \text{ cm}^2 \text{ v}^{-1} \text{ sec}^{-1}$ ;
- (G) molecular ratios of uronic acid/hexosamines/sulfate of about 1/1/2;
- (H) powder of ivory color, amorphous and [lightly] slightly hydroscopic;
- (I) a pH of 5 percent aqueous solution of the said oligoheteropolysaccharide of about [6.5 to about 8] 7; and
- (J) a discharge of the color from blue to reddish blue in a metachromatic identification reaction in which 1 ml of a 2 percent solution of the oligoheteropolysaccharide is added to 1 ml of a 0.0025 percent solution of toluidine blue acidified with 0.1 ml of 1 N hydrochloric acid.

12. Cancel claim 12 without prejudice.

13. (Amended) A method of increasing the antithrombotic activity of mammalian blood relative to the anticoagulant